

Identified for
U. C. Anthropol.

aug. 1956

Hidden Cave, Churchill Co.,
Nevada

see Grosscup
letter

~~Duties for Vertebrate Paleontology~~

~~Routine duties, etc. from #1 of old report~~

Scapulae except fibularis, coracoid?
418 T 438, scapulae sp?
429 T 438, scapulae sp?
~~434 T 444 pedal phalanges~~
~~412, 426, 428 vertebrae, sp?~~

410, 420, 424, 431, 436, 439
~~11, 124, 63, 287, 81, 113, 110, 118, 112, 65, 69, 66, 114, 107~~
72, 75, 61, 82, 84, 80, 102, 79, 76 - all mammae

418

429

434

438

444

410, 420, 424, 431, 436, 439 - mammals

412, 426, 428, bird or insect

The rest are unidentified scraps

Small grebe bones

Tarsus 109 Colymbus (auritus?)
 150 " " ?
 135 " (nigricollis?)
 144 " "
 111 Colymbus 49

Tibiotarsus - all more
 like Colymbus nigricollis
 4, 14, 30, 39, 7, 34

Ulna 2 Colymbus (nigricollis?)

Humerus " " ?
 307, 310

C. auritus? 308

Large grebe

Actinophorus occidentalis

humerus 303, 328, 319, 345

Tarsus 130, 12, 104

Tibiotarsus 24 and 1

Ulna 298 (Ulna 285
 ulna 270 sp?)

Chelydromys
 large

✓ Dist hum. 355 - Anatinae (Teal)
✓ Humeri 322, 331, 313, 312, 349

Size Histrionus of Chaibornetta

Tarsus 134, 133, 151, 148, 153, 138
128, 155, 152, 129, 126

Size range of N. affinis or Histrionus

✓ Humeri 305, 311, 358, 339, 330, 304, 338
Nyrocinus. Size N. affinis & marila

Humeri Nyrocinus size of N. collaris
✓ 304, 341, 337, 302, 340, 336, 309

Tarsus 142, 143, Nyrocinus, largeish

Tarsus 140 - Very large Nyrocinus

Tarsus 14.7 - Anatinae Pintail?

✓ Humeri 333 size of Mallard
deformed?

✓ Humeri 344 - Mallard?

Tarsus 137 = auritus
139 = "

74 = ?

Humerus 346 = auritus
363 = "

352 = "?

Coracoid 175, 173 = auritus
181, 180 = "
158, 177 = "?

161 = deformed

Humerus $\left. \begin{array}{l} 283 \\ 282 \\ 280, 293 \\ 300 \end{array} \right\}$ auritus

* 56.5 mm 299 " ? (small)
286 ? (dist end)

Scapula 185 auritus

Tibia 19 49

- 132 - larger than *Thaenides*
- 13 - *Pelecanus erythrorhynchos*
- 136 - *Haliaeetus leucorhynchus*
a little smaller
- 354 - *Oreo (wilsonianus?)*
- 321 } *Falco peregrinus* or
- 281 } *mexicanus*
- 277 }
- 146 - *Bubo or Gallinula?*

0

361

India?

- 169 Larva imm. large
- 183) Larva (size of argentatus
- 122) or glaucens)
- 329 } large Larva
- 327 }
- 208 }
- 13 - White Pelican Larva
- 127 - Larva or Stenocera
- 170 " " " small
- 174 - Larva
- 306 - "
- 25 - White Pelican

351 - humerus

✓301 - ♀ falco mex? or peregrinus?

348 - ? humerus

230) ulnae ?
~~211~~

✓122, ✓132, ✓141 Tarsus
(glaciers?)

✓306 - 2 pcs humerus
small gull

✓292 - femur of gull about
size of L. calif.

✓361 - Julia amer. humerus

✓246 - Col. nig? ulna

✓157 - sandpiper ? tarsus ✓

✓125 - Cormorant (austr.)

✓211. T. mex ulna & ^{tarsus}

1	grebe, tibia, A. occidentalis (large)	21	duck tibia	41	41. — 55 pelvis &
2	species? wing frag.	22	" " small	42	vertebrae
3	Raven, tibia, Corvus corax	23	duck tibia	43	except 46
4	grebe tibia C. nigricollis	24	grebe, tibia A. occidentalis	44	
5	duck tibia	25	Pelican tibia frag. (eruptus?)	45	
6	" "	26	grebe, fibula, A. occ.	46	Quill, mandible, large
7	grebe, tibia, C. nigricollis	27	Raven tibia, Corvus corax	47	
8		28	duck tibia	48	
9		29	duck tibia	49	
10	sp? wing frag	30	grebe, tibia, C. nigricollis	50	
11	mammal	31	duck tibia	51	
12	grebe tarsus, A. occidentalis	32	duck tibia	52	
13	Pelican tarsus, P. erythrorhynchos	33	duck tibia	53	
14	grebe, tibia, C. nigricollis	34	grebe, tibia C. nigricollis	54	
15	grebe fibula, A. occ.	35	duck tibia	55	
16	duck tibia	36	duck tibia	56	Pelican, Coracoid P. erythrorhynchos
17	sp? wing frag.	37		57	scap
18	species? tibia	38	duck tibia	58	scap
19	common? tibia, P. auritus	39	grebe, tibia, C. nigricollis	59	grebe, sternum A. occidentalis
20	duck tibia	40	Fulica or gallinula tibia	60	species?

121 sp. ? wing frag.

2 Larus tarsus size = glaucoscapus & argentatus

3 sp. ? wing frag.

4 mammal "

5 comorant (P. auritus)

5 ~~sp. ? wing frag.~~ carpenter's

6 Duck tarsus N. affinis, Histrionus

7 small gull or tern yg tarsus

8 Duck tarsus N. affinis, Histrionus

9 Duck tarsus N. affinis, Histrionus

130 gulls, tarsus, C. occidentalis

1 Raven tarsus. C. corax

2 ~~Larus~~ sp. tarsus

2 Duck tarsus N. affinis, Histrionus

4 " " " "

5 gulls, tarsus C. nigricollis?

6 eagle tarsus, H. leucorhynchus

7 comorant, tarsus P. auritus

8 Duck tarsus N. affinis, Histrionus

9 comorant, tarsus, P. auritus

140 Duck, tarsus large Nyrzimus

141 ~~same as 132~~ larus tarsus

2 Duck tarsus, large Nyrzimus

3 " " " "

4 gulls, tarsus C. auritus

5 Duck tarsus N. affinis, Histrionus

6 Rallus or Gallinula tarsus

7 Duck tarsus, Pintail?

8 " " N. affinis, Histrionus

9 " " small Nyrzimus

150 gulls, tarsus C. auritus?

1 Duck tarsus N. affinis, Histrionus

2 " " " "

3 Duck tarsus, N. affinis, Histrionus

4 " " short & stout

5 " " N. affinis, Histrionus

6

7 Sandpiper? tarsus

8 comorant, coracoid, P. auritus

9 duck coracoid

160 geese or large duck coracoid

161 comorant, coracoid, P. auritus

2 duck coracoid

3 " " small

4 duck coracoid

5 duck coracoid

6 " "

7 " "

8 duck coracoid

9 Raven, Coracoid C. corax (large)

170 small gull or tern coracoid

1 duck coracoid

2 duck coracoid

3 comorant, coracoid, P. auritus

4 Gull, coracoid, Larus sp.?

5 comorant, coracoid, P. auritus

6 duck coracoid

7 comorant, coracoid, P. auritus

8 duck coracoid

9 duck coracoid

180 comorant, coracoid, P. auritus

- 241 duck ulna small
 2 duck ulna ~~small~~ med
 3 " " med
 4 " " med
 5 " " med
 6 Grebe C. neg. ulna
 7 duck ulna
 8 duck ulna
 9 duck ulna

- 250
 1 duck ulna
 2 duck, ulna
 3 " "
 4 " " small
 5
 6
 7 duck small ulna
 8 " ulna
 9 duck ulna

260 duck ulna small

- 261
 2
 3 duck ulna
 4 " "
 5 " "
 X 6 grebe ulna
 7 duck ulna

- X 270 grebe, ulna species?
 1 duck ulna
 2 duck ulna
 3 Raven ulna, C. corax
 4 duck, ulna
 5 " "
 6
 7 Falco p. mex. femur (2 pcs)
 8 Duck femur
 9 Duck femur
 280 Cormorant, femur P. auritus

- 281 Falco mex. ? femur
 2 cormorant, femur, P. auritus
 3 " " " "
 4 duck femur
 5 grebe femur frag. A. occident
 6 cormorant, femur, P. auritus
 7 mammal
 8 duck, small femur

- 290 duck small femur
 2 1 grebe, femur C. nigricollis!
 2 Gull (L. calif, size femur)
 3 cormorant, femur P. auritus
 4 duck, small femur
 5 Duck large femur
 6 Duck small femur
 7 duck femur (small)
 8 grebe, femur, A. occidentalis
 9 cormorant, femur P. auritus
 300 cormorant, femur P. auritus

301 ♀ f. mex or pere. humerus

2 Duck humerus, *Nyrocinus*

3 Grebe, humerus *A. occidentalis*

4 Duck humerus, *Nyrocinus*

5 Duck humerus, *Nyrocinus* subfam.

6 Quill, humerus (small)

7 Grebe, humerus, *C. nigricollis*?

8 Grebe, humerus, *C. auritus*?

9 Duck humerus, *Nyrocinus*

310 Grebe, humerus *C. nigricollis*?

11 Duck humerus, *Nyrocinus*

12 Duck humerus, size *Charitonetta*, *Histrionus*

13 " " " "

17

18

19 Grebe, humerus, *A. occidentalis*

320

321 Talus ~~par~~ humerus

2 Duck ^{humerus} size of *Histrionus* or *Charitonetta*

7 Quill, humerus, large yg, *Larus*

8 Grebe, humerus *A. occidentalis*

9 Quill, coracoid

330 Duck humerus, *Nyrocinus*

1 Duck humerus, size *Histrionus*, *Charitonetta*

2

3

4 Duck, humerus, *Nyrocinus*

6 Duck humerus *Nyrocinus*

7 Duck humerus, *Nyrocinus*

8 Duck humerus, *Nyrocinus*

9 Duck humerus, *Nyrocinus*

340 Duck " "

341 Duck humerus, *Nyrocinus*

2

3

4 Duck humerus, Mallard?

5 Grebe, humerus, *A. occidentalis*

6 Cormorant, humerus, *P. auritus*

8 humerus of ?

49 Duck humerus, size *Histrionus*, *Charitonetta*

350

1 humerus of ?

2 Cormorant humerus, *P. auritus*

3 Duck, humerus Mallard deformed?

4 Owl, *Asio* sp (*Wilsonianus*?) humerus

5 Duck, humerus Teal

6

7

8 Duck humerus *Nyrocinus*

360

361 *Falcia* humerus

362

363 Cormorant, humerus *P. auritus*

Camagouty, tibia 418
 Duck humeri 314, 316, 318, 320, 323, 324, 325, 332, 335, 342, 343, 347, 350, 353, 357, 359, 360, 362, 416

Magpie humerus 326

Goose 384 carpometacarpus, B. nigriceps?

Owl 387 " " Rubo

Marsh Hawk 375 carpus

Gallinule 381 " "

Larus carpus 379, 383

41 mammal

62 duck humerus

63 mammal

64

65 mammal

66 mammal

67 sp. 2 wing prop?

68

69 mammal

70

71

2 mammal

3

4 corvus tarsus, P. auratus

5 mammal

6 mammal

7

8

9 mammal

80 mammal

81 mammal

2 mammal

3

4

5 frag.

6

7 mammal

8

9

90 duck femur

1

2 Magpie, tibia, Pica

3

4

5 duck humerus

6

7

8

9

100

101

2 mammal

3 duck tibia

4 grebe tarsus A. occid.

5

6

7 mammal

8

9 grebe tarsus C. auratus?

110 mammal

11 grebe, tarsus, Colymbus sp. (yg.)

12 mammal

13 mammal

14 mammal

15 Raven tarsus, C. cerax

16

17

18 mammal

19 duck tibia

120

- 181 corvid, coracoid, *P. auritus*
 2 duck coracoid ^{size of argyrotatus}
 3 gull, mandible ^{glaucescens}
 4
 5 corvid, coracoid, *P. auritus*
 6 duck scapula
 7 " scapula
 8 duck scapula
 9 duck large coracoid, ^{winged} *Scotus*
 196 duck scapula
 1 gbe, scapula, *A. oc.*
 2 duck, scapula
 3 duck scapula
 4
 5
 6
 7 duck furcula
 8 duck furcula
 9 " "

200

- 201 duck furcula
 2 corvid, large sternum
 3 Duck humerus
 4 " "
 5 *Raven ulna C. corax*
 6 *Raven ulna* " "
 7 corvid, ulna, *P. auritus*
 8 gull ulna, *Larus, luteus* sp.
 9 duck ulna
 210 duck ulna
 1 *Falco mex* ♀ ulna
 2 duck ulna ?
 3 duck ulna
 4 " "
 5 " "
 6 " "
 7 duck ulna
 8 " "
 9 duck ulna

220 duck ulna

- 221 duck ulna
 2 " "
 3 duck ulna
 4 " "
 5 duck ulna
 6 duck ulna
 7 duck ulna
 8 " "
 9 " "
 230 ulna of ?
 1 duck ulna
 2 duck ulna
 3 duck ulna
 4
 5 duck ulna
 6 " " small
 7 duck ulna
 8 " "
 9 " "

240 duck ulna

mammal	bird scap	scap
11	8 pedal phal.	161
124	26 fibula	9
63	15 "	
287		
81	269 — ?	415
113	200 —	414
110	195 — furcula	417
118	196 — "	
112	261 — ulna	423
65	X 429 — scapula	413
69	— .412 vert	419 (?)
66	— .426 "	427
114	X 418 tibia	421
107	X 438 scapula	419
72	— .428 vert	441
75	431 "	422
61	X 434 pedal phal.	433
82	X 444 " "	430
87	X 429 scapula	432
80		425
102		435
79		410
76		442
410		437
424		440
420		444
436		
439		
431		

41-55 - pelvis, vertebrae, sacra
except 46 - mandible (removed to
ident.)

BIRD BONES FROM HIDDEN CAVE, Carson Sink Basin, Nevada
 Identified for University of California Department of Anthropology,
 at request of Gordon L. Grosscup

1. Grebe, Aechmophorus occidentalis	tibiotarsus
2. species?	wing fragment
3. Raven, Corvus corax	tibiotarsus
4. Grebe, Colymbus nigricollis	tibiotarsus
5. Duck	tibiotarsus
6. "	"
7. Grebe, Colymbus nigricollis	"
8.	
9.	
10.	
11. Mammal	
12. Grebe, Aechmophorus occidentalis	tarsometatarsus
13. Pelican, Pelecanus erythrorhynchus	"
14. Grebe, Colymbus nigricollis	tibiotarsus
15. Grebe, Aechmophorus occidentalis	fibula
16. Duck	tibiotarsus
17.	
18.	
19. Cormorant, Phalacrocorax auritus	tibiotarsus
20. Duck	"
21. "	"
22. " (small)	"
23. "	"
24. Grebe, Aechmophorus occidentalis	"
25. Pelican, Pelecanus (erythrorhynchus?)	" (fragment)
26. Grebe, Aechmophorus occidentalis	fibula
27. Raven, Corvus corax	tibiotarsus
28. Duck	"
29. "	"
30. Grebe, Colymbus nigricollis	"
31. Duck	"
32. "	"
33. "	"
34. Grebe, Colymbus nigricollis	"
35. Duck	"
36. "	"
37.	
38. Duck	tibiotarsus
39. Grebe, Colymbus nigricollis	"
40. Coot or Gallinule, Fulica americana or Gallinula chloropus	"
41-55 unidentified vertebrae and pelves	
EXCEPT	
46. Gull, size of Larus glaucescens	lower mandible
56. Pelican, Pelecanus erythrorhynchus	coracoid
57-58 Scrap	
59. Grebe, Aechmophorus occidentalis	sternum
60.	
61. Mammal	
62. Duck	humerus
63. Mammal	
64.	
65. Mammal	
66. Mammal	
67-68 Fragments of wing bones	
69. Mammal	
70-71 Fragments of wing bones	
72. Mammal	
73.	

74. Cormorant, <i>Phalacrocorax auritus</i>	tarsometatarsus
75.-76. Mammal	
77-78. Serpax Wing fragments	
79-82. Mammals 82. Mammal	
83-86. Wing fragments	
87. Mammal	
88-89.	
90 Duck	femur
91.	
92. Magpie, <i>Pica</i> sp.?	tibiotarsus
93-94	
95. Duck	humerus
96-101	
102. Mammal	
103. Duck	tibiotarsus
104. Grebe, <i>Aechmophorus occidentalis</i>	tarsometatarsus
105-106	
107. Mammal	
108.	
109. Grebe, <i>Colymbus auritus</i> ?	tarsometatarsus
110. Mammal	
111. Grebe, <i>Colymbus</i> sp.? (Young)	"
112-114. Mammal	
115. Raven, <i>Corvus corax</i> ,	tarsometatarsus
116-117	
118. Mammal	
119. Duck	tibiotarsus
120-121.	
122. Gull, size of glaucocyanus <i>Larus</i> glaucescens or argentatus	tarsometatarsus
123. Wing fragment	
124. Mammal	
125. Wing fragment <i>Cormorant, Phalacrocorax auritus californiacus</i>	
126. Duck, N. cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
127. Small gull or tern (young)	"
128. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
129. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
130. Grebe, <i>Aechmophorus occidentalis</i>	tarsometatarsus
131. Raven <i>Corvus corax</i>	"
132. Gull, <i>Larus</i>	"
133. Duck, cf. <i>Nyroca affinis</i> or <i>H</i> <i>Histrionicus</i>	tarsometatarsus
135. Grebe, <i>Colymbus nigricollis</i> ?	"
136. Eagle, <i>Haliaeetus leucocephalus</i>	"
137. Cormorant, <i>Phalacrocorax auritus</i>	"
138. Duck, cf. <i>Nyroca affinis</i> , or <i>Histrionicus</i>	"
139. Cormorant, <i>Phalacrocorax auritus</i>	"
140. Duck, large of subfamily <i>Nyrocinae</i>	"
141. Gull, <i>Larus</i>	"
142. Duck, large, subfamily <i>Nyrocinae</i>	"
144. Grebe, <i>Colymbus auritus</i> ?	"
145. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	"
146. Rail or Gallinule, <i>Rallus</i> or <i>Gallinula</i>	"
147. Duck, <i>Anas acuta</i> ?	"
148. Duck (see 145)	"
149. Duck small, subfamily <i>Nyrocinae</i>	"
150. Grebe, <i>Colymbus auritus</i> ?	"

151. Duck, (see 145)	tarsometatarsus
154. Duck,	"
155. (see 145)	"
156. 157 ¹⁵³ Sandpiper?	"
158. Cormorant, Phalacrocorax auritus	coracoid
159. Duck	"
160. Goose or large duck	"
161. Cormorant, Phalacrocorax auritus	"
162. Duck	"
169. Raven, Corvus corax (large)	"
170. Small gull or tern	"
171-172. Duck	"
173. Cormorant, Phalacrocorax	"
174. Gull, Larus sp.?	"
175. Cormorant, Phalacrocorax auritus	"
176. Duck	"
177. Cormorant, Phalacrocorax auritus	"
178. Duck	"
180. Cormorant, Phalacrocorax auritus	"
182. Duck	"
183. Gull, size of Larus glaucescens or Larus argentatus	mandible
184.	
185. Cormorant, Phalax Phalacrocorax auritus	coracoid
186. x187 - 188. Duck	scapula
180. Duck, White-winged Scoter?	coracoid
190. Duck	scapula
191. Grebe, Aechmophorus occidentalis	"
192.-193. Duck	"
194-196.	
197.-199. Duck	furcula
200.	
201. Duck	furcula
202. Cormorant, Phalacrocorax sp.	sternum
203-204. Duck	humerus
205. Raven, Corvus corax	ulna
207. Cormorant, Phalacrocorax auritus	"
208. Gull, large species of Larus	"
209 209-210. Duck	"
211. Falcon, Falco mexicanus (female)	"
212-240 Duck (EXCEPT 230 and 234) Duck	"
241.-249. Duck (EXCEPT 246) Duck (except 246)	"
251-254 Duck	"
257-260 Duck	"
263-267 Duck	"
266. Grebe, large	"
267. Duck	"
270. Grebe, large	"
271.-272. Duck	"
273. Raven, Corvus corax	"
274-275 Duck	"
277. Falcon, Falco peregrinus or mexicanus	femur
278-279. Duck	femur
280 Cormorant, Phalacrocorax auritus	"
281. Falcon, Falco mexicanus?	"
282. Cormorant, Phalacrocorax auritus	"
284. Duck	"
285. Grebe, Aechmophorus occidentalis	"
286. Cormorant, Phalacrocorax auritus	"
287. Mammal	
288. Duck (small)	femur
290. Duck (small)	"

ulna

246, Gull, Colymbus nigricollis

292. Gull, size of *Larus californicus*

femur

291. Grebe, *Colymbus nigricollis*?
 293. Cormorant, *Phalacrocorax auritus*
 294. Duck (small)
 295. Duck (large)
 296. Duck (small)

femur

"

"

"

"

"

298. Grebe, *Aechmophorus occidentalis*
 299. Cormorant, *Phalacrocorax auritus*

femur
 humerus

302. Duck, subfamily *Nyrocinæ*
 303. Grebe, *Aechmophorus occidentalis*
 304. Duck, subfamily *Nyrocinæ*
 306. Gull, *Larus* (small)

"

"

"

"

307. Grebe, *Colymbus nigricollis*?
 308. Grebe, *Colymbus auritus*?
 309. Duck, subfamily *Nyrocinæ*
 310. Grebe, *Colymbus nigricollis*?

"

"

"

"

311. Duck, subfamily *Nyrocinæ*
 312. Duck, size of *Chritonetta* or *Histrionicus*

"

"

319. Grebe, *Aechmophorus occidentalis*
 321. Falcon, *Falco peregrinus* or *mexicanus*

"

"

322. Duck, size of *Chritonetta* or *Histrionicus*
 327. Gull, large species of *Larus*

"

"

328. Grebe, *Aechmophorus occidentalis*
 329. Gull, *Larus*

"

coracoid
 humerus

330. Duck, subfamily *Nyrocinæ*
 331. Duck size of *Histrionicus* or
Charitonetta

"

"

334. Duck, subfamily *Nyrocinæ*
 337-341. Duck, Subfamily *Nyrocinæ*
 344. Duck, Mallard?

"

"

"

345. Grebe, *Aechmophorus occidentalis*
 346. Cormorant, *Phalacrocorax auritus*

"

"

349. Duck, size of *Chritonetta* or *Histrionicus*
 352. Cormorant, *Phalacrocorax auritus*

"

"

353. Duck, Mallard (deformed)?
 354. Owl, *Asio* (*wilsonianus*)?

"

"

355. Duck (Teal?)

"

"

- 357-359. Duck, subfamily *Nyrocinæ* (except 361)
 363. Cormorant, *Phalacrocorax auritus*

"

316. Duck

"

318. "

"

320. "

"

- 323-325. Duck

"

- 342-343. "

"

- 347

"

350. Gull, *Fulica americana*

humerus

- 365-374. Duck

carpometacarpus
 carpometacarpus

- 375 Hawk, *Circus hudsonius*

"

- 376-378. Duck

"

379. Gull, *Larus*

"

380. Duck

"

381. Gallinule, *Gallinula chloropus*

"

383. Gull, *Larus*

"

384. Goose (small) *Branta nigricans*?

"

387. Owl, *Bubo virginianus*

"

humerus

Magpie, *Pica* sp.

Insert
 in proper
 places
 above

August 20, 1956

Mr. Norman Roust
789 - 61st St.
Oakland 9, California

Dear Mr. Roust:

The bones from Hidden Cave are being packed today for shipment to you, as per your telephoned request of last Thursday, August 16.

I enclose, herewith, a list of the specimens that I have identified. As I mentioned to you on the phone, I haven't the time to undertake the detailed identification of the duck bones.

You will note that Mr. Grosscup had numbered all the bones, and apparently did some preliminary sorting of them as well; I found that for the most part numbers on one skeletal element ran consecutively. He indicated the numbers contained in each box. I have not put the bones back in the same boxes, however, but have left them in the groups as I identified them. The numbers should make it quite simple to reassemble them in whatever way you desire.

Sincerely yours,

Hildegarde Howard
Chief Curator
Division of Science

HH: LG

c.c. Mr. Gordon Grosscup
enc.

BIRD BONES FROM HIDDEN CAVE, Carson Sink Basin, Nevada
 Identified for University of California Department of Anthropology
 at request of Gordon L. Grosscup

1.	Grebe, <i>Aechmophorus occidentalis</i>	tibiotarsus
3.	Raven, <i>Corvus corax</i>	tibiotarsus
4.	Grebe, <i>Colymbus nigricollis</i>	tibiotarsus
5.	Duck	tibiotarsus
6.	"	"
7.	Grebe, <i>Colymbus nigricollis</i>	"
11.	Mammal	
12.	Grebe, <i>Aechmophorus occidentalis</i>	tarsometatarsus
13.	Pelican, <i>Pelecanus erythrorhynchus</i>	"
14.	Grebe, <i>Colymbus nigricollis</i>	tibiotarsus
15.	Grebe, <i>Aechmophorus occidentalis</i>	fibula
16.	Duck	tibiotarsus
19.	Cormorant, <i>Phalacrocorax auritus</i>	tibiotarsus
20.	Duck	"
21.	"	"
22.	" (small)	"
23.	"	"
24.	Grebe, <i>Aechmophorus occidentalis</i>	"
25.	Pelican, <i>Pelecanus (erythrorhynchus?)</i>	" (fragment)
26.	Grebe, <i>Aechmophorus occidentalis</i>	fibula
27.	Raven, <i>Corvus corax</i>	tibiotarsus
28.	Duck	"
29.	"	"
30.	Grebe, <i>Colymbus nigricollis</i>	"
31.	Duck	"
32.	"	"
33.	"	"
34.	Grebe, <i>Colymbus nigricollis</i>	"
35.	Duck	"
36.	"	"
38.	Duck	tibiotarsus
39.	Grebe, <i>Colymbus nigricollis</i>	"
40.	Coot or Gallinule, <i>Fulica americana</i> or <i>Gallinula chloropus</i>	"
46.	Gull, size of <i>Larus glaucescens</i>	lower mandible
56.	Pelican, <i>Pelecanus erythrorhynchus</i>	coracoid
59.	Grebe, <i>Aechmophorus occidentalis</i>	sternum
61.	Mammal	
62.	Duck	humerus
63.	Mammal	
65.	Mammal	
66.	Mammal	
69.	Mammal	
72.	Mammal	
74.	Cormorant, <i>Phalacrocorax auritus</i>	tarsometatarsus
75-76.	Mammal	
79-82.	Mammal	
87.	Mammal	
90.	Duck	femur
92.	Magpie, <i>Pica sp.?</i>	tibiotarsus

95. Duck	humerus
102. Mammal	
103. Duck	tibiotarsus
104. Grebe, <i>Aechmophorus occidentalis</i>	tarsometatarsus
107. Mammal	
109. Grebe, <i>Colymbus auritus</i> ?	tarsometatarsus
110. Mammal	
111. Grebe, <i>Colymbus</i> sp.? (Young)	"
112-114. Mammal	
115. Raven, <i>Corvus corax</i>	tarsometatarsus
118. Mammal	
119. Duck	tibiotarsus
122. Gull, size of <i>Larus glaucescens</i> or <i>argentatus</i>	tarsometatarsus
124. Mammal	
125. Cormorant, <i>Phalacrocorax auritus</i>	carpometacarpus
126. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
127. Small gull or tern (Young)	"
128. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
129. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
130. Grebe, <i>Aechmophorus occidentalis</i>	tarsometatarsus
131. Raven <i>Corvus corax</i>	"
132. Gull, <i>Larus</i>	"
133-134. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	tarsometatarsus
135. Grebe, <i>Colymbus nigricollis</i> ?	"
136. Eagle, <i>Haliaeetus leucocephalus</i>	"
137. Cormorant, <i>Phalacrocorax auritus</i>	"
138. Duck, cf. <i>Nyroca affinis</i> , or <i>Histrionicus</i>	"
139. Cormorant, <i>Phalacrocorax auritus</i>	"
140. Duck, large of subfamily <i>Nyrocinae</i>	"
141. Gull, <i>Larus</i>	"
142-143. Duck, large, subfamily <i>Nyrocinae</i>	"
144. Grebe, <i>Colymbus auritus</i> ?	"
145. Duck, cf. <i>Nyroca affinis</i> or <i>Histrionicus</i>	"
146. Rail or Gallinule, <i>Rallus</i> or <i>Gallinula</i>	"
147. Duck, <i>Anas acuta</i> ?	"
148. Duck (see 145)	"
149. Duck small, subfamily <i>Nyrocinae</i>	"
150. Grebe, <i>Colymbus auritus</i> ?	"
151-153. Duck, (see 145)	tarsometatarsus
154. Duck	"
155. (see 145)	"
156. Sandpiper?	"
158. Cormorant, <i>Phalacrocorax auritus</i>	coracoid
159. Duck	"
160. Goose or large duck	"
161. Cormorant, <i>Phalacrocorax auritus</i>	"
162-168. Duck	"

169. Raven, <i>Corvus corax</i> (large)	coracoid
170. Small gull or tern	"
171-172. Duck	"
173. Cormorant, <i>Phalacrocorax</i>	"
174. Gull, <i>Larus</i> sp.?	"
175. Cormorant, <i>Phalacrocorax auritus</i>	"
176. Duck	"
177. Cormorant, <i>Phalacrocorax auritus</i>	"
178-179. Duck	"
180-181. Cormorant, <i>Phalacrocorax auritus</i>	"
182. Duck	"
183. Gull, size of <i>Larus glaucescens</i> or <i>Larus argentatus</i>	mandible
185. Cormorant, <i>Phalacrocorax auritus</i>	coracoid
186-188. Duck	scapula
189. Duck, White-winged Scoter?	coracoid
190. Duck	scapula
191. Grebe, <i>Aechmophorus occidentalis</i>	"
192-193. Duck	"
197-199. Duck	furcula
201. Duck	furcula
202. Cormorant, <i>Phalacrocorax</i> sp.	sternum
203-204. Duck	humerus
205-206. Raven, <i>Corvus corax</i>	ulna
207. Cormorant, <i>Phalacrocorax auritus</i>	"
208. Gull, large species of <i>Larus</i>	"
209-210. Duck	"
211. Falcon, <i>Falco mexicanus</i> (female)	"
212-240. (EXCEPT 230 and 234) Duck	"
241-249. Duck (EXCEPT 246)	"
246. Grebe, <i>Colymbus nigricollis</i>	Ulna
251-254. Duck	"
257-260. Duck	"
263-265. Duck	"
266. Grebe, large	"
267. Duck	"
270. Grebe, large	"
271-272. Duck	"
273. Raven, <i>Corvus corax</i>	"
274-275. Duck	"
277. Falcon, <i>Falco peregrinus</i> or <i>mexicanus</i>	femur
278-279. Duck	femur
280. Cormorant, <i>Phalacrocorax auritus</i>	"
281. Falcon, <i>Falco mexicanus</i> ?	"
282-283. Cormorant, <i>Phalacrocorax auritus</i>	"
284. Duck	"
285. Grebe, <i>Aechmophorus occidentalis</i>	"
286. Cormorant, <i>Phalacrocorax auritus</i>	"
287. Mammal	
288. Duck (small)	femur
290. Duck (small)	"
291. Grebe, <i>Colymbus nigricollis</i> ?	femur
292. Gull, size of <i>Larus californicus</i>	femur
293. Cormorant, <i>Phalacrocorax auritus</i>	"
294. Duck (small)	"
295. Duck (large)	"
296-297. Duck (small)	"

298. Grebe, <i>Aechmophorus occidentalis</i>	femur
299-300. Cormorant, <i>Phalacrocorax auritus</i>	"
301. Falcon, <i>Falco mexicanus</i> or <i>peregrinus</i>	femur
302. Duck, subfamily <i>Nyrocinæ</i>	humerus
303. Grebe, <i>Aechmophorus occidentalis</i>	"
304-305. Duck, subfamily <i>Nyrocinæ</i>	"
306. Gull, <i>Larus</i> (small)	"
307. Grebe, <i>Colymbus nigricollis</i> ?	"
308. Grebe, <i>Colymbus auritus</i> ?	"
309. Duck, subfamily <i>Nyrocinæ</i>	"
310. Grebe, <i>Colymbus nigricollis</i> ?	"
311. Duck, subfamily <i>Nyrocinæ</i>	"
312-314. Duck, size of <i>Chritonetta</i> or <i>Histrionicus</i>	"
316. Duck	"
318. Duck	"
319. Grebe, <i>Aechmophorus occidentalis</i>	"
320. Duck	"
321. Falcon, <i>Falco peregrinus</i> or <i>mexicanus</i>	"
322. Duck, size of <i>Chritonetta</i> or <i>Histrionicus</i>	"
323-325. Duck	"
326. Magpie, <i>Pica</i> sp.	"
327. Gull, large species of <i>Larus</i>	"
328. Grebe, <i>Aechmophorus occidentalis</i>	"
329. Gull, <i>Larus</i>	coracoid
330. Duck, subfamily <i>Nyrocinæ</i>	humerus
331-332. Duck	"
334-335. Duck	"
337-341. Duck, subfamily <i>Nyrocinæ</i>	"
342-343. Duck	"
344. Duck, Mallard?	"
345. Grebe, <i>Aechmophorus occidentalis</i>	"
346. Cormorant, <i>Phalacrocorax auritus</i>	"
347. Duck	"
349. Duck, size of <i>Chritonetta</i> or <i>Histrionicus</i>	"
350. Duck	"
352. Cormorant, <i>Phalacrocorax auritus</i>	"
353. Duck, Mallard (deformed)?	"
354. Owl, <i>Asio</i> (<i>wilsonianus</i> ?)	"
355. Duck (Teal?)	"
357-362. Duck (EXCEPT 361)	"
361. Coot, <i>Fulica americana</i>	"
363. Cormorant, <i>Phalacrocorax auritus</i>	"
365-374. Duck	carpometacarpus
375. Hawk, <i>Circus hudsonius</i>	carpometacarpus
376-378. Duck	"
379. Gull, <i>Larus</i>	"
380. Duck	"
381. Gallinule, <i>Gallinula chloropus</i>	"
383. Gull, <i>Larus</i>	"
384. Goose (small) <i>Branta nigricans</i> ?	"
387. Owl, <i>Bubo virginianus</i>	"

Address Reply to Raymond deSaussure
2756 34th Avenue
San Francisco 16, Calif.

WESTERN SPELEOLOGICAL INSTITUTE, INC.

Dedicated to the Study and Preservation of Natural Caves

October 12, 1955.

Dr. Hildegarde Howard
Chief Curator
Division of Science.

Dear Dr. Howard:

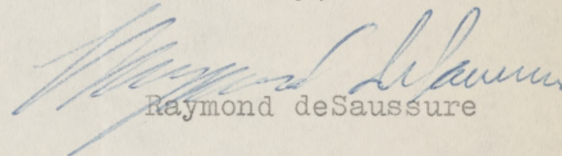
Many thanks for the bone identifications. I see that I am still reversing my right and left humeri which I shall have to correct.

I wonder if you have any further knowledge or information concerning condors. Have they shown up at any other paleo sites which would indicate the extent in time of the species? It is my understanding from various local sources around the Museum of Northern Arizona that the birds are not ~~presently~~ known presently, nor have traces appeared in that area.

Assuming that the bones have been approximately pene-contemporaneous, then we have a reasonably large area represented, for Stanton's Cave is approximately 30 miles below Lee's Ferry. Tse-an-Kaetan is just below the South Rim Village, and Tooth Cave is several canyons to the east. Luka Cave is farther east and on the north side of the river. Therefore, we probably have represented an area along 60-70 miles of Colorado River at an absolute minimum. On the basis of the number of finds, I am reasonably certain that other points within this area would also yield Gymnogyps.

I will be interested in any information that you may add to this that may relate to earlier finds.

Sincerely,


Raymond deSaussure

memo: the bones have been received. Thank you,

October 4, 1955

Mr. Raymond deSaussure
Museum of Northern Arizona
Fort Valley Road
Flagstaff, Arizona

Dear Mr. deSaussure:

Following is a list of the species represented by the bones
you sent in September from Coconino County, Arizona:

Stanton's Cave, Coconino Co., Ariz.

- D 759 Cathartes aura, right humerus, proximal end
- D 758 Gymnogyps californianus, tarsometatarsus
- D 760 Diving duck, right humerus
- D 761 Gymnogyps californianus, right femur *(large wing for analysis but not too heavy calc.)*

Luka Cave, Coconino Co., Ariz.

- D 730 Condor?, ulna or tibiotarsus fragment
- D 756A Teal, Querquedula cyanoptera?, right humerus
- D 756B Goshawk, Astur atricapillus, right scapula

Cave #58, Coconino Co., Ariz.

- D 265B Grouse, coracoid; Dendragapus?
- D 265A Grouse, coracoid; Dendragapus obscurus

Tooth Cave, Coconino Co., Ariz.

- D 512C Gymnogyps californianus wing phalanx
- D 512D Grouse, Dendragapus obscurus, coracoid
- D 512B Gymnogyps californianus, vertebra

Stratigraphy test #8, Tse-an-Kaetan, Coconino Co., Ariz.

- D 762 Gymnogyps californianus, distal 3/4 ulna
- D 755 Grouse, young Dendragapus? humerus

Near guano pit, Tse-an-Bida, Coconino Co., Ariz.

- D 54 Reptile?

The bones will be packed and returned to you today or tomorrow.

Sincerely yours,

Hildegarde Howard
Chief Curator
Division of Science

HH:LG



MUSEUM OF NORTHERN ARIZONA.

FORT VALLEY ROAD

FLAGSTAFF, ARIZONA.

September 6, 1955.

Dr. Hildegarde Howard
Chief Curator, Division of Science
Los Angeles County Museum
Exposition Park
Los Angeles 7, Calif.

Dear Dr. Howard:

We have assembled another batch of bird material from the caves in and around the Grand Canyon. On checking the conditions of your letter of December 1, 1954, I find that this fulfills all the conditions, so I am taking the liberty of shipping 15 specimens to you for identification.

I believe that at least several items of this collection will prove of interest, for Allen Phillips has tentatively identified two fragments as California Condor. Subsequent to this, when attempting to identify additional material, I reached the conclusion that I was dealing with a bird far larger than any hawk or turkey in our collection--in fact a bird whose wingspread I would estimate as about 10'--and which I believe to represent the same California Condor.

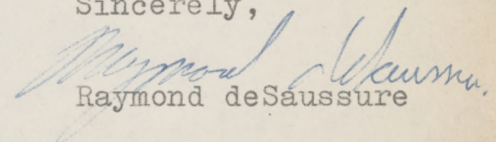
I am dubious of the specimen D-54, which I think may be mammal. However, I can find no comparable bone in our collection, and I have been informed that it is bird, so I am forwarding it for identification.

I have made preliminary identifications on almost all of our mammal material this year, and have taken some of the more difficult problems to John Lance. The conclusion which I reach is that the vast majority of this material probably represents a Pleistocene complex. I believe that I am dealing in many cases with an Antelope from this period. It is certain that it is not identical with the contemporary antelope in the collection. A number of other bones which I also believed to be current species on original examination have shown distinct differences on closer inspection. The collection as a unit will have to wait for a more formal study, since I have neither the time, facilities or background to deal with the more subtle variations involved, but I am fairly well convinced that some valuable ecological data will result.

I would be very interested in any comments which you may have concerning the avian confirmation or denial of this viewpoint.

I am enclosing a reprint concerning some of the material from Tse-an-Kaetan which may be of interest.

Sincerely,


Raymond deSaussure

Sent to: H. Howard

Date Sept. 6, 1955.

L. A. COUNTY MUSEUM

No.	Description	Check return
✓ D-759	Cathartes aura ^{Right} Left Humerus On rocks in front of Stanton's Cave, Coconino Co., Ariz. Coll. & ident. by RD	
✓ D-758	Condor (?) Tarso-metatarsus Extreme back of Stanton's Cave, Coconino Co., Ariz. Coll. & ident. by RD	
✓ D-730	Condor (?) Ulna, center section Miscell. Surface feature 1.1 Luka Cave, Coconino Co., Ariz. Coll. & ident. by RD	
✓ D-760	^{Right} Left humerus, bird about size of Falcon On rocks in front of Stanton's Cave, Coconino Co., Ariz. Coll. & ident. by RD	Diviny duck
✓ D-756A	^{Right} Left humerus, bird Miscell. Surf. Feat. 1.2 Luka Cave, Coconino Co., Ariz. Collect. & ident. by RD	Teal, Querquedula cyanoptera?
✓ D-756B	^{Right scapula} Left scapula, upper fragment. Data as above	goshawk, Astur atricapillus
✓ D-265B	Grouse (?) Coracoid Main section of cave Cave #58, Coconino Co., Ariz. Collect. on floor by RD. Ident. by A. Phillips.	Deudragapus?
✓ D-265A	Grouse (?) Coracoid. Ident. as above	Deudragapus obscurus
✓ D-54	Bird (??) Tibia (?) I have been informed that this is bird, but am unable to identify it personally. Collected near guano pit by A. Lange Surface. Tse-an-Bida, Coconino Co., Ariz.	Reptile?
✓ D-512C	Condor (?) fragment. Collected in Tooth Cave, Coconino Co., Ariz. about half way to back. Coll. by RD. Ident. by A. Phillips	Wing phalange
✓ D-512D	Grouse (?) coracoid data as above.	Deudragapus obscurus
✓ D-512B	Condor (?) (Vertebrae - RD) Ident. = 512C	
✓ D-755	Bird Right humerus, fragmentary Stratigraphy test #8 Surface Collect. by D. Schwarz. Tse-an-Kastan, Coconino Co., Ariz. Ident. by RD	Grouse. Deudragapus?
✓ D-761	Condor (?) Right femur Surface collect. Stanton's Cave, Coconino Co., Ariz. Collect. & ident. by RD	Large enough for Pleistocene form of Gymnogyps californianus but within maximum
✓ D-762	Condor (?) ulna Stratigraphy test #8 Surface Tse-an-Kastan, Coconino Co., Ariz. Collect. & ident. by RD.	OK ☒ to living Condor

To be returned to drawer marked
Paleontological-bird in the
Cave collection of the Museum of
Northern Arizona.

4 cc: mf 1,2; in letter; with specimens
attach mail receipts

File under

Identifications for ~~outside~~ other
~~institutions~~

Identified by Howard
Returned Feb. 16, '55?

WESTERN SPELEOLOGICAL INSTITUTE

Identification of specimens shipped to Dr. Hildegard Howard, Los Angeles County Museum for identification. Specimens have been collected in and around Grand Canyon National Park, and must be therefore returned to Museum of Northern Arizona which holds collecting permits.

December 3, 1954.

Tsean Kaetan (Cave #74) Grand Canyon National Park, Back of Cremation Canyon. Cave is relatively inaccessible, but contains archeological material. This material is of extreme interest, and not yet connect with the Indian chronology of the Southwest. Also associated are Mt. Sheep, Mt. Goat and Woodchuck, all presently extinct in the area. All material is surface.

D-363 10/15/54 Approx. 42 meters depth in horiz. passage.
A. Lange Deep Twilight Zone. Backbone (Turkey?) *Meleagris gallopavo*

mammal D-401 10/29/54 Approx. 55 meters depth. Sta. K R. deSaussure
Total Darkness. ~~XXXXXXXXXXXXXXXXXXXX~~
Upper skull.

D-403 10/29/54 Approx. 45 meters depth Sta. D R. deSaussure
Deep Twilight Zone (2 *Mergus Merganser*) Lt. Humerus. Grouse.

D-433 10/29/54 Approx. 5 meters depth Sta. A R. deSaussure
Twilight Zone (Turkey?) Lt. Tibiotarsus Turkey. *Meleagris gallopavo*

Cave #90 Grand Canyon National Park. Back of Boulder Canyon. Cave is relatively inaccessible. Cave has yielded considerable fossil material.

D-507 11/14/54 Approx. 150' depth R. deSaussure Total Darkness:
Associated directly with tooth of ~~fx~~ native American horse.
3 unidentified limb fragments. 2 unidentified fragments, bird (mammal)

mammal D-515 11/14/54 Approx. 75' depth R. deSaussure Total Darkness
buller Associated with Woodchuck and Mt. Sheep. skull.

Cave #87 Grand Canyon National Park. Back of middle fork of Grapevine Canyon. Shallow cave of about 10' depth used primarily by birds. Rope techniques advisable to reach.

D-537 11/13/54 R. deSaussure Daylight Zone. Beak
Evening Grosbeak. *Haesperiphona vespertina*

Lonetree Cave (Cave #26) Grand Canyon National Park. Lonetree Canyon. Small cave of about 15' depth. 6th class climbing techniques required for access.

D-296 10/1/54 R. deSaussure Shallow Twilight Zone. Approx. 2 m depth.
~~Rt. humerus (gull or raven?)~~ left femur Duck. *Sufflamen*
Nyrocinus
Genus Buccephala?

Porcupine Cave T29N R2E Sec. 29 Elev. 6400' Kaibab Nat. Forest, Coconino Co., Ariz.

rabbit? D-76 11/1/53 R. deSaussure Approx. 6 meter depth Total darkness
(rat-chewed) Lt. femur.

San Nicolas Island bones -- partial list (Aug. 25, 1949)

Dog bones from Site 1 W -- 4-18-40

Humerus, 6 Right, 5 left, 1 frag, 5 epiphyses
 Ulna 4 " 4 " 4 "
 Radius 5 " 5 " 1 " 4 "
 Scapula 3 " 3 " 3 "
 Femur 3 " 2 " 3 " 4 "
 Tibia 3 " 5 " 1 " 4 "
 Fibula 2 specimens
 Metapodials 51 complete, 24 fragments
 Sternal segments, 9
 Ribs, 145
 Vertebrae, 23 cervical, 28, thoracic, 10 lumbar, 1 sacrum, 6 caudal
 40 young and broken
 Pelvis, 3 fragments
 Carpals and tarsals, 17
 Many phalanges
 Many epiphyses of vertebral centra
 Cranium, 5
 rami of jaws, 7
 Upper mandibular fragments, 10
 Many fragments of skull parts

Dog bones from same site as above, but bones are white (surface?)

2 right femur
 2 left humerus, 1 fragment
 1 left, 1 right tibia, 1 fragment
 1 right, 1 left ulna
 17 vertebrae, part of sacrum and 2 caudals
 4 pelvic fragments
 3 calcanea
 20 metapodials
 8 phalanges

Dog bones same date (4-18-40) but does not say the site. Look like those in the first list.

Right and left femora
 Right and left halves of pelvis
 Left humerus
 Right and left ulnae
 1 distal young tibia
 1 distal young ulna
 1 left scapula
 37 vertebrae, 1 sacrum, 8 caudals, and 22 young and broken
 17 metapodials
 2 fibulae
 25 carpals and tarsals
 71 ribs
 6 sternal segments
 Phalanges and epiphyses

*for woodhouse
 bones kept in
 0.5 lbs left*

San Nicolas Island bones, partial list (Aug. 25, 1949)

Fur Seal? (should be checked again to see if one or two species)

A4616, July 1939, Site 1 West, Surface

Humerus, 7 right, 6 left, plus fragments (2)
Radius " (12)
Ulna 9 specimens
Low mandible 3 right rami, 2 left rami
Pelvis, 5 halves, 2 fragments
Scapula, 6 fragments
Femur, 1 right
Tibia, 2 left, 1 right, 1 fragment
phalanges, 14
Sternal segment, 1
Axis vertebra frag., 1

Sea Otter

Surface Site 1 W, July, 1939

4 halves pelvis
humerus, 3 left, 2 right, 3 fragments, 1 very yg complete
Femur, 2 right
Radii, 2
Tibia, 5
Rami of low jaw, 5
Ulnae, 4

*In warehouse
Bones kept in
Oyster Lab*

Identifications of bones from Canterbury Cave, Ventura Co., Calif.
Excavated, 1929

Sea Lion 2

Wild Cat 2

Fur Seal 7

Gray Fox 3

Otaridae, sp. 1

Mt. Lion 3

Porpoise or dolphin 9

Mephitis 1

Dog (or coyote?) 14

Bovidae 2 (cow?)

Deer 56 (10 look quite modern) Frogs: 1 bone

Miscellaneous mammal bones unidentified, 4 femora, 4 skull fragments

RODENTS:

Jack rabbit: 2 tibiae, 3 pelvis, 1 femur, 2 scapulae, 1 ulna

Cottontail: 3 pelvis, 2 femur, 2 tibiae, 1 ulna, 1 humerus

Brush rabbit: 1 pelvis, 3 femora, 2 rami, 3 humeri, 4 tibiae

Gopher: 5 fragments skulls, 13 rami, 4 pelvis, 1 tibia, 2 humeri,
4 femora

Neotoma: 1 incomplete skull, 6 femora, 7 tibiae, 2 pelvis, 3 humeri
1 ramus

Microtus: 1 incomplete skull, 1 pelvis

Ground squirrel: 4 fragments skull, 4 pelvis, 2 femora, 1 radius

Dipodomys: 7 tibiae, 1 femur

Miscellaneous teeth

Pulaski

Identifications of bones from Pulaski County, Ky. (Sheep Cave)

Grouse humerus, quail sternum and furcula, passerine carpometacarpus

Rabbit humerus, gnawed fragment of a large bone (mammal?)

3/22/49 for Woodman
bones to him except
Sheep Cave

Identifications of bones from Pichacho Cave, New Mexico
excavated by L.A. Mus. summer of 1929. Many bones appear still greasy,
and still more have ligaments adhering.

RODENTS

*Jack Rabbit: fragments of skull 2; rami of lower jaw, 5.

Geomys arenarius: 1 fragment of skull, 1 complete skull, 2 inc.
skulls, 1 pair of lower rami, 1 humerus (tentative)

Sigmodon hispidus: 3 fragments of skulls

Small cottontail: 2 femora, 1 scapula, 8 pelvis fragments, 4 tibiae,
4 incomplete femora

Ondatra zibethica pallida; 1 tibia

Sylvilagus f. holzneri?: tibia, 3 femora, frag. tibia

*Jack Rabbit, cont'd: articulated humerus, ulna, radius (greasy);
femur, humerus, 2 frag. tibiae, 9 frag. pelvis;
2 radii, 4 scapulae, another pelvis (gray).
1 comp. tibia.

OTHER MAMMALS (not domestic)

~~Mustela xanthogenus~~ - cranium
Skunk: humerus (2), 1 yg.

Large Mustelid: pair of femora

Homo sapiens: 5th finger phalanx (burned?)

Deer: frag. scapula, humerus, fragments of upper and lower jaws
(Odocoileus couesi)

Coyote: scapula, 2 humeri

Cat? articulated bones of part, mummified

DOMESTIC MAMMALS (?)

Cattle or bison: 1 tarsal, ³ rami of lower jaw

Goat: front cannon bone with phalanges and 2 tarsals; hind cannon
bone (yg. and incomplete) (2)

Sheep or goat: portion of humerus, frag. upper jaw, frag. cranium,
3 frags. pelvis, metapodial, humerus, frag. scapula

Mammal, sps? -- 33 fragments unidentified

REPTILES

Snake vertebrae -- 3 sets (incomplete)

Tortoise (Box?) -- fragments of gastron and carapace without part
adhering

FISH -- vertebrae (2 sets incomplete)

BIRDS: Goose, coracoid, with scapulae adhering; 1 separate scapula

Horned owl: 2 femora, 2 humeri, 1 tibia-fibula

Duck: skull, humerus, coracoid, furcula

Crane: dorsal part of cranium, frag. humerus

3/22/49

Supplestyx
cranium

Dele Bryan

Identified for ~~Garrett~~ O'Brien of Gila Pueblo - *Bones not there*

Identifications of bird bones from Mesa Verde, Colorado

March 17, 1949

Sack A -- Site 1, Slab rooms (ca. A.D. 850)

Turkey:

7 femora, 1 scapula, 1 carpometacarpus, 1 radius, 1 fibula,
4 ulnae, 6 tibiotarsi, 3 humeri, 1 set fused thoracics
Mammal bones 4, of which the skull is a domestic dog.

Sack B -- Site 1, Pit house 1 (ca. A.D. 850)

Small domestic dog skull only

Sack C -- Site 1, Pit house 2 (ca. A.D. 850)

Crow: ulna

All others are mammal of which tentative identifications are:

Large Jack Rabbit, 7

Small Rabbit, 6

Rodent, 1

Ungulate (deer?), 1

Sack D -- Site 2, Mixed slab room Village and early Pueblo (ca. 850-1000AD)

Turkey:

1 tibiotarsus, 2 femora, 2 tarsometatarsi (of which one is young),

1 fragment of sacrum, 1 pedal phalanx

Mammal bones 3, of which small jaw appears to be dog, others are
of a large ungulate (deer?)

Sack E -- Site 1, Debris mound (ca. A.D. 1000)

Turkey:

sternum, femur, sacrum

Mammal bones 8, of which tentative identifications are:

ramus of gray fox

ramus and fragment of pelvis of domestic dog

humerus of large (jack) rabbit

humerus, pelvis and skull of small rabbit

fragment of jaw of ungulate

Sack F -- Site 1, Kiva (ca. A.D. 1000)

(All are turkey except 1 large vertebrate (mammal) and 2 rabbit bones)

Turkey:

right and left ulnae; right and left carpometacarpi; right and left
radii (1 diseased); right and left tarsometatarsi, 2 tibiotarsi
(both right); 1 fibula, 1 humerus, 1 femur, 3 phalanges

Sack G -- Site 2, Slab rooms (ca. 850 A.D.)

Turkey:

humerus (2), tibiotarsus, ulna, vertebra

Mammal bones 9, tentatively identified as follows:

Domestic dog: 2 rami of jaw, humerus, ulna, radius, scapula

" " ? : fragments of tibia, femur and calcaneum

Sack H -- Site 2, Mixed Slab room Village and early Pueblo (850-1000A.D.)

Turkey:

carpometacarpus (young), ulna, 2 tibiotarsi, humerus

Mammal bones, 7, tentatively identified as follows:

Rabbit femur

Rodent pelvis

Domestic dog radius, scapula and jaw (young)

Miscellaneous 2

Sack I -- Site 2, Kiva (ca. 1000A.D.)

Turkey humerus

Mammal bones, 2 (large jack rabbit)

Sack J -- Site 2, Debris mound (A.D. 1000)

Turkey: humerus and femur

Mammal bones 3: 2 distal ends humeri wild cat, 1 tibia dog

Lode Canyon -- Site 3, '47, PIII, Debris mound (A.D. 1100 - 1200)

Hawk (small Buteo), femur

Grouse, humerus

Turkey: 2 sterna, 14 humeri, 11 tarsometatarsi, 11 coracoids,

4 carpometacarpi, 11 tibiotarsi, 6 ulnae, 2 scapulae,

2 radii, 3 vertebrae

Mammal bones (in separate sack), 44. Tentative identifications:

Jack rabbit, 4 femora, 1 fragment pelvis, 1 tibia, 2 humeri, 1 ulna

Small rabbit, 2 humeri, 1 femur, 1 frag. pelvis, 1 tibia (young)

rodent, sp. 2 femora, 1 tibia

fox?, femur; wild cat pelvic fragment

large ungulate (2 species?): 4 cannon bones, 4 scapulae, 1 humerus,

1 rib, 4 phalanges, 2 calcanea

miscellaneous: 2 fragments pelvis (one looks like young human),

rib, sternal segment, vertebrae

Note: The mammal bones should all be gone over by a mammalian osteologist; these are only very tentative identifications

Bird bones identified by Hildegard Howard, Curator of Avian Paleontology
Los Angeles County Museum

Measurements on turkey bones from Mesa Verde, Colo.
identified for Garritt O'Brien of Gila Pueblo, March 17, 1949

Eric O'Brien

✓ O Tibia, Sack D, 850-1000 A.D. (196.6 mm. long)
Femur, (same site), 117.3 intern length, 24.0 br. distal end
Tarsometatarsus (same site) 133.4 mm length, 61.8 ht to top of spur at base
58.3 ht to tip of spur, 53.6 ht to under side
of spur at base, 22.4 br. prox., 20.2, br. dist

✓ P Sack F (A.D. 1000)

Ulna (2) 122.6 mm. long *R+L*

Carpometacarpus (2) 64.3 mm. gr. length, 61.0 to ball of M3 *R+L*

Radius, 109.3 mm. long

Tarsometatarsi, 131.5 mm. long, 18.5 br. dist. (right)

130.8 mm. " , 19.1 br. dist., 19.6 br. prox (left)

Tibiotarsi (2), distal end 17.0, prox. end, 19.1 (2 specimens, 1 of each end)
humerus, 147.6 long, 30.1 br. dist., 37.6 br. prox., 15.5 br. sn.

✓ 1 femur, 117.6 internal length, 128.7 gr. length, 27.3 br. dist.

Sack J - (A.D. 1000) dist. and humerus, br. 21.2

✓ E Sack E (ca. A.D. 1000)

femur, 102.2 inter. length, 113.2 gr. length, 22.3 br. dist.

✓ G Sack G (850 A.D.)

tibiotarsus, 23.8 br. prox. art.

ulna, 120.7 mm. long

✓ A Sack A (ca. A.D. 850)

femora: 21.5 br dist., 96.7 internal length

111.0 ap. gr. length, 104.6 internal length

other 4, br. dist.: 22.7, 21.6, 22.8, 22.3

ulnae (4): lengths, 113.7, 122.1, 122.6, 122.5

tibiotarsi, distal brs., 6.7, 7.8, 7.6

humeri, 115.3 length, 29.5 br. prox, 25.2, br. dist.

another measures 30.7 br. prox.

✓ I Sack I (ca 1000 AD) *dist. and humerus, br. 28.4*

Lode Canyon Site 3 (A.D. 1100 - 1200)

✓ humerus, length 142.1, br. dist. 30.0

136.5 28.5, pbr. prox . 36.4

118.6 24.8 29.8

118.7 25.4 30.7

117.1 25.6 31.2

32.1

30.6

25.6

30.8

31.3

tarsometatarsi, length 125.0, br. prox. 19.2, br. dist. 19.1 (no spur)

" 117.7 19.3 18.3 " "

20.3

21.7

20.1

22.1

23 plus? (*dissected below head of not involving prox br*)

25.3

20.0

Coracoids lengths, 100.1, 102.1, 95.9, 78.2, 79.9, 76.6, 74.0 mm.

Carpometacarpi gr. length 60.7, length to ball MIII, 57.8

75.7 71.5

79.4 74.6

Tibiotarsus, br. dist. 22.8, 21.1, 21.2, 20.3, 17.2, 16.9?

Ulna, 150.3 long

radius 134.0 long

Identification of bones from N.W. Coast of Santa Rosa Island
Material from Santa Barbara Museum, excavated in 1947 -- returned
October 15, 1948

Group 1 -- no data slip:

Branta canadensis canadensis -- humerus and coracoid (large)
Branta nigricans "
Haliaeetus leucocephalus (Bald Eagle), carpometacarpus (proximal)
Branta canadensis (smaller subsp.?) complete coracoid
Corvus corax, Raven, cranium
Goose, sp. proximal end humerus, furcula, scapula
5 unidentified fragments
Duck, probably *Mareca americana* (Baldpate) -- ulna

Group 2 -- Garanon marine

Ptychoramphus aleuticus (Auklet) -- coracoid and humerus
Buteo borealis (Red-tailed hawk) -- tarsometatarsus
Haliaeetus leucocephalus -- carpometacarpus
Mareca americana? -- proximal end of humerus
Branta canadensis canadensis -- 2 femora
Branta canadensis -- smaller subsp. -- carpometacarpus, ulna
Goose, sp., humerus, furcula, carpometacarpus
Vertebra, sp.?
2 fragments

Group 3 -- Tecolote -- terrestrial deposit

Goose, sp. -- 2 fragments humeri, furcula, coracoid, ulna,
and carpometacarpus (all fragmentary)
Chendytes? -- fragment of distal end of femur (appears petrified)
Sula? -- distal end of tarsometatarsus -- should be studied more.
Fulmar or Shearwater -- fragment of coracoid
Mallard duck? -- ulna (a little stout, however)
Duck, sp. -- scapula
phalanx, sp.?
9 fragments

Group 4 -- E. Arlington High

Diomedea albatrus (Albatross) -- larger ulna (appears "worked")
Phalacrocorax penicillatus (Cormorant) -- smaller ulna

Identified by Hildegard Howard
Los Angeles County Museum

A 3401

Augustine Mound.

- 13 *Margaritifera margaritifera falcata* (Gould)
4 *Anodonta cygnea* (Linnaeus)

Herzog Mound

- 2 *Physa fontinalis* (Linnaeus)
4 *Helisoma trivolvis* (Say)
2 *Margaritifera margaritifera falcata* (Gould)
2 *Anodonta cygnea* (Linnaeus)

Mendoza Site

Short-tailed Albatross, carpometacarpus, proximal end humerus

Calif. Brown Pelican, humerus

Pacific Loon -- humerus

Farallon Cormorant -- proximal end humerus

Pelagic Cormorant -- incomplete pelvis

White-fronted (?) Goose -- furcula and proximal end humerus

White-winged Scoter, ulna and distal end humerus

Sooty Shearwater -- ulna

Gull (large size), nearly complete humerus

Raven -- distal end humerus, young

Large shorebird? -- pelvis

McClure site

penicillatus Cormorant -- 2 femora (mc3), ulna (Mc4), dist. humerus Mc1

Farallon Cormorant -- lower mandible (MC1)

Pelagic Cormorant -- 2 tibiotarsi (Mc 1 and Mc 3) Mc 3

Young cormorant, of one of the above species, incomplete carpus (~~2xx~~)

Goose, sp? -- coracoid, ~~xxxx~~ prox. humerus, Anser or Chen

Bird skeletons from sand dunes — El Segundo

Pelecanus o. calif.

2 ~~Starnella~~ *neglecta*

2 *Speotyto cunicularia*

Larus occidentalis (probably)

Sophorhynchus californica

Brought in by

Pierce

Feb. 1939

1 nearly complete
meadow lark kept

also 1 bone of domestic cat

Redondo

Dolphin or Papine vert (dolphin back)
Calif. Sea Lion, femur & teeth ~~fibia~~

Deer mandible, cannon bone 1
Sea Otter 2 humeri, tibia
Sea Seal? can. & 4th tibia
Jack Rabbit? mandible, tibia
Hares 2 phals.

Conterbury Cave

Sea Lion Radius, pelvis } which?
Sea Seal Pelvis, humerus?, mandible, tibia, toe 1, tarsals 11 } radius
Papine or dolphin vert 11111
Deer femur, scap(2) calcaneus 5, cannon bone 11, jaw 1, tibia 16, atlas 11
ulna 11, cubit 1, tarsals 11, phals. 111 111 111, humerus 1
Bovid, atlas, tooth

Wild cat skull 1, calcaneus 1

probs. locate
Canid tibia 11, ulna 1, humerus 1, rad. 11, fem. 11
pelvis 1, tarsals together 11, toe 1

Reynard, hum 1, rad. 11

~~Jack rabbit, pelvis 11, femur 1, tibia 1~~

Mt. Lion tibia 1, pelvis 1

Canterbury Cave cont'd

- ✓ Gt. sq. skull frag. ^{III} ~~III~~, ~~skull~~, pelvis I, fem. II, rad I
- ✓ Wood Rat skull frag. 1, jaw 1, fem. ~~III~~, pelvis II, ~~fib.~~ ~~III~~ ~~II~~
humer. III
- ✓ Mead Mouse skull frag. 1, ~~pelvis~~ 1
- ✓ Gopher, skull frag. ~~III~~, jaw Bat, 3 left; pelvis II, fem. III
humer. II, fib. I
- ✓ Jack rabbit, pelvis III, femur 1, ~~fib.~~ II, ulna 1
scap. II
- ✓ Cottontail?, pelvis II?, femur 1, ulna 1, hum. 1, ~~fib.~~ II
- ✓ Brush Rab. pelvis 1, jaw II, femur ~~III~~, hum. II, ~~fib.~~ ~~III~~
- ✓ Kangaroo rat ~~fib.~~ ~~III~~ II, femur 1
- ✓ Skipped skunk, hum 1
- ✓ Pocket mouse skull 1
- ✓ Frog skin

These two large bones
look like ² sternum segments. ^{OK}

They are from the Bennett
Site.

J. B. Lucard.

Elh

List of Bird and Mammal Bones

from Simomo Shellmound

S.A.M.

Bird:

- Brown Pelican (1 humerus, 1 tibia, 1 tarsometatarsus, 2 carpometacarpi, 1 ulna, 1 fragment of lower mandible, 2 radii)
Raven (1 tibia, 1 ulna)
California Murre (1 sternum, 2 humeri) carpus
Farallon Cormorant (1 tarsometatarsus, 1 femur, 1 rostrum 1 carpometacarpus)
Brandt Cormorant? (1 tibia, 1 fragment of mandible)
Cormorant (either Farallon or Brandt) (1 ulna, 1 humerus)
American Loon (1 carpometacarpus, 1 fragment of mandible, 1 sternum, 1 tarsometatarsus)
Pacific Loon (1 radius, 5 humeri)
Western Grebe (1 femur, 1 tarsometatarsus of young individual)
Eared? Grebe (1 tibia)
Albatross? (1 fragment of mandible, 1 phalanx)
Red-tail Hawk (1 humerus)
Hudsonian Curlew? (1 ulna)
Cackling Goose? (1 tarsometatarsus of young individual, 1 ulna)
Ducks (at least two species) 4 humeri, 2 coracoids, 1 carpometacarpus, 1 tarsometatarsus, 1 femur, 1 ulna, 1 radius, 1 tibia)

Mammal:

- Fur Seal (many)
California Sea Lion (1 humerus, 1 femur, 1 tibia, 1 fragment of skull, and tarsal bones and phalanges; all bones appear to be of young individuals)
Sea Otter (1 lower jaw of young individual, 1 tibia, 1 scapula, 2 humeri of young individual, 3 ulnae, 2 femora)
Deer (1 fragment of pelvis, 2 fragments of scapula, 2 calcanei, 1 astragalus, 1 femur)
Domestic Dog (1 cranium of young individual, 1 humerus, 1 pelvis, 1 femur of young individual is probably of this species but might be Coyote)
Dolphin (3 rostra)
Porpoise, sp? or perhaps more than one species (3 skulls (fragmentary))
Cow? (3 phalanges)
Harbor Seal? ? (3 tarsal bones, 2 tympanic bullae)
Jack Rabbit (2 young femora)
Brush Rabbit (1 tibia, 1 fragment of skull)
Cottontail (1 femur)
Ground Squirrel (1 skull in two pieces)
Wild Cat (1 femur of young individual)

Identified by Hildegard Howard

March 21, 1932

Hildegarde Howard

Birds from Pt. Mugu Shellmound
(Lot which came in March 18)

Common Loon	23	
Pacific Loon	3	
Red-throated Loon	6	
Western Grebe	2	(and 2 on the last lot, overlooked on previous report)
Albatross	4	
Brandt Cormorant	18	
Farallon Cormorant	6	
Brown Pelican	32	(and 29 overlooked on the previous report)
Gull	9	
Ducks	14	
Great Blue Heron	--	(1 overlooked on last lot, making 3 for that bunch)
Turkey vulture	3	
Hawks	5	
Black-vented Shearwater	2	
Fulmar	1	
Curlew	1	
Golden Eagle	1	

3 artifacts : Brown Pelican - distal end of humerus;
Horse B Cormorant - proximal end of ulna
Large duck or small goose - shaft of ulna

1 artifact, Horse C: Albatross, proximal end of ulna

Pelecanus occidentalis -- Brown Pelican

Tibia
Vertebra

Geococcyx californianus -- Roadrunner

Tibia (distal end) (4, two of which are young)
Femur (proximal end) (2)
Sacrum

Buteo borealis -- Red-tailed Hawk

Carpometacarpus (2)
Humerus (proximal end),
" distal end
Tarsometatarsus (distal end) ||
Digits
Sternum (fragment) probably this species
Tibiotarsus (distal end) ||
Beak
Body and legs (dried carcass)
Ulna (proximal end) 1?
Coracoid 11 (11/24)
Complete humerus (2) (one young)
Femur (proximal end)
Pelvis and caudals attached
Ulna (distal end)?
Cranium
Foot
Ramus of lower jaw

Incomplete young ? 11

Bubo virginianus--(Horned Owl)

Tibia (4)
Femur (3)
Humerus (2)
Sacrum and part of pelvis
Tarsometatarsus
Coracoid (2)
Ulna

Tyto alba -- Barn Owl

Humerus
Femur
Carpometacarpus (2)
Coracoid

Falco mexicanus -- Prairie Falcon

Tarsometatarsus (?)
Tibiotarsus (2)
Humerus (4)

Corvus corax -- Raven

Ulna ""
Humerus ||
Tibiotarsus ""
Carpometacarpus
Femur ""
Sacrum and part of pelvis

Cathartes aura-- Turkey vulture

Humerus
Carpometacarpus
Coracoid
Wing phalanx
Pelvis

Ulna
Radius

Ventana Cave
for Univ. of Arizona
March 1944

Callipepla squamata (?) -- Scaled (?) quail
Femur (fragment)

Lophortyx (gambeli?)
Humerus

Melopelia asiatica -- White-winged Dove
Humerus

Circus hudsonius -- Marsh Hawk
Ulna

Zenaidura macroura -- Mourning Dove
Sternal fragment
Humerus

Species of Birds Contained in

"Kenneth Bates Collection"

from Carpinteria

Returned to Barbara Duns

Coragyps occidentalis
(Occidental Vulture), one tarsometatarsus

Bird, sp.?
four shafts of bone

Parapavo californicus
(California Turkey)

Neogyps errans
(Errant Eagle)

Femur - two distal ends
Tibiotarsus - two distal ends
Tarsometatarsus - ~~Three~~ ^{three} distal ends, ^{one shaft and} one proximal end
Ulna - ~~two~~ ^{three} proximal ends
Scapula - one (young?)
Carpometacarpus - one (young?)
Humerus - one proximal end (young?)

Ulna - one distal end
Tibiotarsus - one proximal end

Teratornis merriami
(Merriam's Teratorn)

Buteo, sp.?
(Hawk)

Scapula - one
Humerus - one proximal end

Coracoid - two
Scapula - one
Ungual phalanges - two
Ulna - one distal and one proximal end
Femur - one proximal end

Gymnogyps californianus
(California Condor)

Ulna - one proximal end
Ungual phalanx - one

Buteo borealis?
(Red-tailed Hawk)

Eagle, sps.

Tarsometatarsus - one proximal end
Tibiotarsus - two distal end

Femur, - one distal end
Ungual phalanges - six
Pygostyle - one
Fibula - one
Radius - three distal ends

Accipiter cooperi?
(Cooper Hawk)

Bubo virginianus
(Horned Owl)

Tarsometatarsus - one proximal end

Tarsometatarsus - one distal end
Ulna - one proximal end

Urubitinga fragilis
(Fragile Eagle)

Corvus corax
(Raven)

Ulna - one distal end
Scapula - one
Tibiotarsus - one distal end

Radius - one proximal end

Spizaetus grinnelli
(Grinnell Eagle)

Falco sparverius
(Sparrow Hawk)
Tibiotarsus - distal end, one
Tarsometatarsus - one

Humerus - one distal end
Scapula - one

Quail, sp.?
Tarsometatarsus - one

Aquila chrysaetos
(Golden Eagle)

Polyborus cheriway
(Caracara)
Tarsometatarsus - one proximal end

Beak - one
Tarsometatarsus - one

Shorebird (size of Willet)
Tarsometatarsus - one proximal end

Clicker one tarsometatarsus

Species of Mammals Contained in

"Kenneth Bates Collection"

from Carpinteria

Mephitis*
(Striped Skunk)
Skull - one nearly complete
(in 2 parts), one anterior
portion only

Lower jaw, - one fragment

Tibia - one

Humerus - one distal end

Femur - one proximal end, one
young (identification
questionable)

Scapula - one

Spilogale?*

(Spotted Skunk?)

Femur - one young

Urocyon *

Fox

Tibia - one distal end

Lower jaw - one fragment

Sacrum - one

Metapodial - one

Mustela?*

Weasel?

Pelvis - $\frac{1}{2}$

Lepus *

(Jack Rabbit)

Pelvis - $\frac{1}{2}$

Femur - one proximal end

Humerus - one distal end

Lower jaw - one fragment

Vertebra - one

Sylvilagus*

(Brush Rabbit)

Pelvis - two fragments

Femur - one distal end

Squirrel?*

Pelvis - fragment

Equus occidentalis (Identification O.K.
Horse checked by H.A.

External cuneiform - one Wylde)

Bison antiquus (Ident. O.K. by
Bison H.A. Wylde)

Ungual phalanx - one very young

Odocoileus*

(Deer)

Phalanges - three

Rodent? sp.? (size equal to Brush Rabbit)

Tibia - one distal end

Sps.?

One fragment of lower jaw of a
young carnivore

Two caudal vertebrae

One rib

One fragment of cannon bone of a
young artiodactyl

Thomomys*

(Gopher)

Lower jaw - $\frac{1}{2}$

Mammals from Carpinteria, not from Bates

• Eutamias, Chipmunk*

• Tibia - one

• Femur - one young

• Squirrel*

• Pelvis - one fragment

Urocyon, Fox*

Metapodial - one

Sp.?

Radius - distal end

Tibia - distal end

*Note: These identifications should eventually be checked by an authority
on the osteology of small mammals. In general I think they are
correct, but, of course my experience with mammals is not very exten-
sive.

Bird bones from Carpinteria ----Identified by Hildegarde Howard

<i>Coragyps occidentalis</i> -- Occidental Vulture	3
<i>Neogyps errans</i> -- Errant Eagle	4
<i>Neophrontops americanus</i> -- American Neophron	1
<i>Haliaeetus leucocephalus</i> -- Bald Eagle	2
<i>Aquila chrysaetos</i> -- Golden Eagle	10
<i>Spizaetus grinnelli</i> -- Grinnell Eagle	3
<i>Urubitinga fragilis</i> -- Fragile Eagle	8
<i>Wetmoregyps daggetti</i> -- Daggett Eagle	2?
Eagle, sp.? (probably <i>Aquila</i>)	1
<i>Buteo borealis</i> -- Red-tailed Hawk	9
<i>Buteo lineatus</i> -- Zone-tailed Hawk	1
<i>Buteo</i> , sp.?	4
<i>Accipiter cooperii</i> -- Cooper's Hawk	2
<i>Accipiter velox</i> -- Sharp-shinned Hawk	1
<i>Polyborus cheriway</i> -- Caracara	8
<i>Meleagris californicus</i> -- California Turkey	39
<i>Lophortyx californica</i> -- Valley Quail	2
<i>Columba fasciata</i> -- Band-tailed Pigeon	2
<i>Bubo virginianus</i> -- Great Horned Owl	5
<i>Geococcyx californianus</i> -- Roadrunner	6
<i>Corvus corax</i> -- Raven	7
<i>Corvus caurinus</i> -- Crow	1
<i>Colaptes cafer</i> -- Red-shafted Flicker	2
Small mammals	5
	128

Number of species: At least 21

1. Sea Otter (~~Enhydra~~ ^{Potax} lutris)
2. Harbor Seal (*Phoca richardii*)
3. Alaska Fur Seal? (~~Callorhinus~~ ^{Callotaria} ~~alascanus~~)
4. Calif. Sea Lion (*Zalophus californianus*)
~~time bones probably by S.O.~~
5. ~~Young~~ Seals - may be more than one species. (most are yg)
6. Resembles Sea Lion, but smaller
may be Fur Seal.
7. Small Cetacean - Porpoise or
Dolphin? (maybe ~~two~~ ^{several} species)
8. Whale. Species? ~~maybe~~ more than
one (~~at least two rep'd by typewriter~~)
9. Horse (*Equus*)
10. Elephant Seal - *Macrorhinus*
angustirostris

Santa Cruz Island?
Moodie Exp? Geronimensis

House B } *Archaeophonus*
Western Grebe

Larus; Gull

1 tibia
1 ulna
2 complete ulnae
1 prox. end of humerus
1 complete radius
1 complete humerus

Phalacrocorax penicillatus
Biaudet Cormorant

1 tarsus
1 beak
1 humerus
1 " dist. end?
1 ulna prox. end
1 coracoid

Phalacrocorax auritus
Sarallon Cormorant

1 radius
1 dist. end ~~humerus~~
1 humerus

Gavia immer
Common Loon

1 tarsus
1 femur
1 radius
1 coracoid

Gavia pacifica
Pacific Loon

2 humeri (1 complete)
1 ulna
1 radius
1 humerus

Gavia stellata
Red-throated Loon

House C

Larus; Gull

1 in complete humerus
1 distal half of ulna

Phalacrocorax auritus
Sarallon Cormorant

1 radius
1 " ?

Gavia immer
Common Loon

2 ulnae
1 radius

Cathartes aura
Turkey Vulture

1 radius complete

Buteo sp?
Hawk

1 tibia

Diomedea sp.
Albatross

1 ulna

Duck

1 ulna

Mice, localities
 Larks; Gulls } complete ulna
 } 2 dist. ends humerus
 } 1 prox " "
 } 1 dist half ulna
 Diomedea; albatross, humerus, 2 pelvis, 2 vert
 Ardea herodias } humerus and
 Great Blue Heron } carpometa carpus
 Phalacrocorax pelagicus } 1 femur
 Baird Cormorant }
 Cormorant sp. ? 1 beak, 1 humerus
 Phalacrocorax penicillatus } 1 tarsus
 Brandt Cormorant } 1 femur
 } 1 ulna
 } 1 frag. of tibia?
 } 3 prox. ends humeri
 } 2 dist. " "
 Ducks 3 ulnae, 1 carpus, 1 rad., 1 scapula
 Phalacrocorax auritus } 1 radius
 Harlequin Cormorant } 1 scapula
 } 1 half long jaw.
 } 2 femora
 Javia pas. or stell. 2 rad., 1 tarsus
 Javia immer } 3 humeri (1 complete)
 Common Loon } 2 ulnae (" ")
 } 3 coracoids
 } 1 carpus
 } 2 tibiae (frags.)
 Javia pacifica } 1 carpus
 Pacific Loon } 1 femur ?
 } 1 ulna
 Javia stellata 1 tarsus, 1 ulna
 Red throated Loon 1 femur?, 1 tarsus?
 Cathartes aura 1 pelvis (in 2 pieces)
 Turkey Vulture 1 femur
 Buteo sp. 1 tarsus
 Hawk

Identification of bones from Largo Canyon, New Mexico (S.E. of Farmington)

Three separate sets -- from different sites:

- 1) Bones loose in large bag --
 - 27:S -- Pronghorn Antelope, horn core
 - 1:1: Ex -- Horse tooth and Deer antler and Cottontail mandible
 - 17:Ex:Z -- Horse metapodial and deer humerus
 - Also tooth of young deer without number
 - Ribs and other fragments not identifiable
- 2) Small bag of bones --
 - 13-S-0-4 and 15:5Ex B -- portions of upper jaw of young bovid
 - 13:5:Ex:A Lower mandible of Cottontail or Brush Rabbit
- 3) Other bag of bones -- (no numbers on most of bones)
 - Cottontail: Mandible, 2 scapulae, femur, 4 humeri, 3 pelves, 1 tibia metapodials, calcaneum, 2 fragments of upper mandible, vertebrae, radii. All fragmentary.
 - Jack rabbit -- metapodial, femur
 - Deer -- metapodial, calcaneum, phalanges, vertebrae, mandible.
 - Porcupine -- 1 incisor tooth
 - Sheep (domestic?) lower mandible of very young
 - Horse -- vertebra and conyles of skull
 - Wood Rat -- Mandible and femur
 - Squirrel -- radius

Hildegard Howard, L.A. Museum, November 22, 1939

History Dept.

Goff Island

Identifications

*In Woodward
(Winterton name donor)*

Goose, species?

Fragment of carpometacarpus

Mallard

Anas platyrhynchos

Fragment of humerus

Bufflehead Duck

Charitonetta albeola

Ulna

Loon (Red-throated?)

Gavia (stellata?)

Ulna

Domestic Chicken

Gallus domesticus

pelvis, vertebrae, ulna,
2 radii, carpometacarpus

Fur Seal

Arctocephalus townsendi (?)

1 tooth

Badger

Taxidea taxus

1 fragment upper mandible
2 penal bones

Coyote

Canis latrans

1 metapodial
1 carnassial tooth

Ground Squirrel

Citellus beecheyi

scapula, femur, humerus

Kangaroo Rat

Dipodomys agilis

femur

Cottontail

Sylvilagus audubonii

2 pelvis

Fish, species

vertebra and skull fragment

Human

1 metacarpal

Hildegard Howard

October 10, 1939